



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

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MAR 17 2010

Mr. Michael Parrish
Office of Legal Services (MC-205)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Dear Mr. Parrish:

The Environmental Protection Agency (EPA) appreciates the opportunity to review the proposed revisions to the *Texas Surface Water Quality Standards* and is providing comments in the enclosure to this letter. We also reviewed the draft *Procedures to Implement the Texas Surface Water Quality Standards*. Comments specific to those revisions are being transmitted under separate cover.

These proposed revisions represent a significant commitment from the Texas Commission on Environmental Quality (TCEQ), and extensive coordination with numerous entities at the federal, state, and local levels. EPA supports many of the revisions proposed by TCEQ; however, we have identified several key areas of concern.

1. **Process for assigning a Secondary Contact Recreation 1 Use** – It does not appear that the proposed process for revising the recreational use in unclassified waters is consistent with the public participation requirements in the federal regulation at §131.10(e).
2. **Human health criterion for methylmercury** – As previously discussed, EPA will have difficulty in finding Texas' proposed criterion of 0.7 mg/kg scientifically defensible.
3. **Deferred listing process in §307.9(f)** – Proposed language which allows for the deferment of listings for presumed aquatic life uses is not acceptable.
4. **Nutrient Criteria** – The proposed chlorophyll *a* criteria include several relatively high levels (e.g., > 20 ug/l); however, there is no demonstration that these values are protective of designated uses.

We hope these comments are helpful to TCEQ for its rulemaking process. We appreciate the efforts of the TCEQ - Office of Water to address issues of concern to EPA. If you have any questions or would like to arrange a conference call to discuss any of these comments, please contact me at (214) 665-7135 or Jane Watson at (214) 665-7135.

Sincerely,

A handwritten signature in black ink, appearing to read "Miguel I. Flores", with a long horizontal flourish extending to the right.

Miguel I. Flores

Director

Water Quality Protection Division

Enclosure

cc: Ms. Kelly Keel, TCEQ - Water Quality Protection Division (MC-234)
Mr. David Galindo, TCEQ - Water Quality Division (MC-150)

Comments on Proposed Revisions to Texas Surface Water Quality Standards

§307.4 – General Criteria

§307.4(j)(3). Assigning recreational uses to an unclassified water body. The revised recreation uses and criteria, along with the processes for assigning a secondary contact recreation 2 use or a noncontact recreation use, are acceptable. However, we are still concerned with the public participation process for assigning a presumed secondary contact recreation 1 use to unclassified waters. The federal regulation at 40 CFR §131.10(e) states “Prior to adding or removing any use, or establishing sub-categories of a use, the State shall provide notice and an opportunity for a public hearing under Sec. 131.20(b) of this regulation” [emphasis added]. If public notification on a downgraded recreation use occurs through the §303(d) process, there is no opportunity to request a public hearing on the proposed use change. If public notification occurs through the permitting process, only an “affected person” under Texas law may request a public (“contested case”) hearing. This would exclude environmental groups or recreational groups such as paddlers, divers, or surfers, and does not appear to meet the public participation test in the federal regulation.

Similar language is included in the draft Implementation Procedures (page 198) for aquatic life Use Attainability Analyses (UAAs) for unclassified streams. Although the only proposed change to this sentence is placement, it is also not consistent with the federal standards regulation.

§307.6 – Toxic Materials

307.6(a) Application. This section makes reference to the applicability of criteria (for toxic materials) under the influence of conditions “beyond the limits of this section” due to “natural phenomena” not otherwise affected by “waste discharges or human activities.” Sections 307.4 (General Criteria) and 307.7 (Site Specific Uses and Criteria) similarly define the applicability of criteria in this manner. Please see the following regarding EPA’s policy regarding the application of site specific numeric aquatic life criteria based on natural background: <http://www.epa.gov/waterscience/criteria/library/naturalback.pdf>. Please note that this policy does not apply to human health uses. To date, we have seen no procedures that describe the process used to demonstrate the difference between “natural phenomena” and human influence, other than those found in the Implementation Procedures that specifically describe how designated uses or general and numerical water quality criteria may be modified to take into account site-specific, local conditions. The existing procedures do not allow for the application of criteria based on natural background levels outside of the development of site-specific criteria or UAA. In the absence of either (1) a natural background provision supporting criteria that may be set equal to a less stringent natural background level and a detailed procedure for determining natural background, or (2) the establishment of site-specific uses/criteria based on natural background levels with a UAA or other study, the criteria found in §307.4, §307.6, and §307.7 would, in EPA’s view, stand as the applicable criteria for CWA purposes.

§307.6(c)(7)(C). There is a typographical error in the proposed equation for the provision to calculated criteria for persistent toxic materials. The factor of “0.5” should be “0.05.”

§307.6(d)(1) – Table 2 Criteria In Water For Specific Toxic Materials Human Health Protection

- **Methylmercury** – As previously discussed, EPA will have difficulty in finding Texas’ proposed criterion of 0.7 mg/kg scientifically defensible, based on its reliance on an minimum risk level (MRL) which EPA explicitly chose not to use as the sole basis for the 2001 §304(a) nationally recommended water quality criterion.¹ EPA’s 2001 recommended methylmercury criterion is based on an RfD of 0.0001 mg/kg/day (also found in the IRIS database), which is more stringent than ATSDR’s MRL. Although TCEQ may choose to adopt a criterion different from EPA’s national recommendation, we must be able to find the State’s criterion scientifically defensible. Based on current information from TCEQ, the use of the MRL and exposure studies as described by TCEQ, in place of the EPA-recommended RfD derived from epidemiological studies, does not appear to be a scientifically defensible method for deriving human health criteria. EPA also notes that the Caddo Lake study referenced in the preamble to the proposed standards, is an exposure study rather than an epidemiology study or other measure of health endpoints.² These exposure data, while of scientific interest, are not relevant to determining a criterion for the protection of human health.
- **N-Nitroso-di-n-Butylamine** – We believe that the human health criterion for consumption of water and fish should be 0.119 ug/l, rather than 0.19 ug/l.

§307.7 – Site-specific Uses and Criteria

§307.7(4)(E). Nutrient Criteria. As noted below under Appendix F, the use of chlorophyll *a*, plus “supplemental screening values” of total phosphorus and transparency, may not be as protective as a single criterion, preferably a causal criterion such as total phosphorus or total nitrogen. EPA guidance recommends the use of causal variable criteria as the primary determination of use attainment. The State has not presented a scientific rationale for coupling the chlorophyll *a* criteria with the use of screening levels for total phosphorus and transparency.

§307.9. Determination of Standards Attainment

§307.9(b). EPA has serious concerns with the following sentence in the proposed language: “Sample results that are used to assess standards attainment must not include samples that are collected during extreme hydrologic conditions such as high flows and flooding immediately after heavy rains.” This sentence could be applied too generally and suggests applicability to all

¹ ATSDR Backgrounder: Toxicological Profile for Mercury, April 1999.

² DSHS. 2005. *Health Consultation: Mercury Exposure Investigation Caddo Lake Area-Harrison County Texas*. Agency for Toxic Substances and Disease Registry.
http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/sfr/085.pdf

conditions and parameters. EPA disagrees with the automatic exclusion of sample results from those samples collected during extreme hydrologic conditions such as high flow events in all cases. This should be a site and/or designated use based determination and is best addressed in the assessment procedures, as referenced in the last sentence. Although loading may be diluted during high flow event, there may be cumulative effects for toxic pollutants (e.g., accumulation in sediment).

§307.9(c)(2). Collection and preservation of water samples. This paragraph states that depth collection procedures for various parameters to determine standards attainment may vary depending on the water body being sampled. However, the last sentence says that standards for these parameters will only apply to the mixed surface layer. This is somewhat confusing in that, based on our understanding of the referenced procedures document, standards may apply to *the entire water column*, or to the mixed surface layer, depending on a thermal/density stratification determination. This paragraph suggests that depth collection procedures may vary, but the standards will only apply to measurements taken in the mixed surface layer (or to a single surface sample) - i.e., the standards will not apply to dissolved oxygen measurements taken throughout the entire water column in the absence of stratification. EPA recommends that the rule maintain some measure of specificity on the applicability of measurements taken at depth in deeper water systems when such systems are *not* stratified.

§307.9(c)(3). Removal of these paragraphs from the current standards and the use of paragraph of (c)(2) confines measurement of dissolved oxygen in all water body types (for standards compliance purposes) to a single sample taken near the surface. Items (B) and (C) from (c)(3) are more consistent with TCEQ's monitoring procedures for impounded waters and tidal waters.³ This document includes measurement of vertical profiles of the entire water column, or at a depth (between 1 foot and one half the depth of the mixed surface layer), in stratified waters. Will assessments of dissolved oxygen data for standards compliance in all water body types be solely based on near surface measurements with this change? EPA recommends that the rule maintain some measure of specificity on the applicability of measurements taken at depth in deep water systems.

§307.9(e). Sampling periodicity and evaluation. The required minimum sampling period for a number of constituents under this section has been extended from one year to two years. This change is presumably intended to match the same requirement for assuring temporally representative data as described in the assessment guidance. Although this change is acceptable, it is also likely more restrictive than what is currently allowed in the assessment guidance. The same flexibility provided in the assessment guidance to allow for the use of data collected over shorter periods of time should be provided in the water quality standards. More specifically, the assessment guidance states:

³ TCEQ. 2008. *Surface Water Quality Monitoring Procedures Manual - Volume I: Physical and Chemical Monitoring Methods for Water, Sediment and Tissue*. Report No. RG-415. Texas Commission on Environmental Quality, Austin, TX. 210 pp.

"In some instances where water quality has dramatically improved or declined recently and there is good cause to believe the change will be persistent, the assessor may determine it is appropriate to use only the more recent and representative data set for assessing specific parameters likely to be affected by the changed conditions. These changes in water quality could be due to identified permanent changes in pollutant loadings, such as a new treatment facility, implementation of best management practices, or hydrologic changes."

Similar flexibility should also be allowed for cases in which minimum sample size requirements for making an assessment determination are met (as also discussed in the assessment guidance). For instance, if monthly sampling in a single given year provides 12 data points, of which the requisite number of exceedances to demonstrate that there is an impairment using the State's binomial assessment approach is met (and additional sampling would not change this determination), the State would be expected to take an action to place the water body on the §303(d) list irrespective of the two year requirement (since this would also meet the minimum sample size requirement for "adequate data" of 10).

§307.9(e)(3). Bacteria. EPA has serious concerns with the sentence: "Samples must not include extreme hydrologic conditions such as very high flows and flooding immediately after heavy rains." EPA disagrees with the automatic exclusion of sample results from those samples collected during extreme hydrologic conditions such as high flow events in all cases, including the requirement for a 24-hour period of exemption. These decisions should be site and/or designated use based determinations. A UAA would be required to justify that primary contact use activities, such as swimming, rafting or kayaking, are not attainable above the excluded flow magnitudes described in §307.9(e)(3)(A) and (B). The UAA process should be adequately rigorous to accurately characterize the use. Also, any changes in the use should be accompanied with an effective public participation process.

§307.9(e)(4). Toxic materials. The draft standards include changing from an average to a median for assessment of human health criteria. EPA recommends the use of the mean or an upper percentile value of a dataset when assessing human health criteria. The following text from Appendix C of EPA's CALM guidance provides a good discussion of the concept of using measures of central tendency vs. extreme values in this type of assessment.⁴

"The choice of whether to measure central tendency or extreme values in a population distribution usually depends on whether we want some convenient means of characterizing the "average" condition in the population or if we want to know the magnitude of the "best" or "worst" conditions in the population. In the former situation we would focus on the mean or median. For example if some sort of remedial action had been applied to reduce nutrient loading in a body of water, we might want to compare mean or median concentrations of various phosphates or algal abundances before and after treatment to determine if there had been a "general" improvement in the body of water. Alternatively, if we had human health concerns associated with consumption of fish tissue containing mercury above some threshold concentration, we might want to

⁴ U.S. EPA, 2002. *Consolidated Assessment and Listing Methodology, Toward a Compendium of Best Practices, First Edition. July, 2002.* Office of Wetlands, Oceans and Watersheds. Washington, D.C. available at: <http://www.epa.gov/owow/monitoring/calm.html>.

estimate the 95th percentile of tissues concentrations of mercury in the resident fish population. The reason for this is that if 5% or more of the fish have tissue levels above a critical threshold for human health effects, there would be at least a 1/20 chance of toxic exposure due to human consumption of those fish. This would be so regardless of the magnitude of the population mean or median mercury concentration. In other words, interest focuses on the extremes (e.g., the 95th percentile) because it is only the extremes that are likely to effect human health."

The use of a median will typically smooth out extreme values to provide a description of average conditions. However, for protection of human health, extreme values are more of a concern. The use of a mean (or an upper percentile value) incorporates magnitude more than with use of a median.

§307.9(e)(7). Chlorophyll *a* and total phosphorus in reservoirs. We are unsure why the chlorophyll *a* criteria will not be treated as stand-alone criteria in data assessments. The need for an additional indicator (total phosphorus) to confirm attainment/non-attainment suggests that there remains uncertainty in the ability of the chlorophyll *a* criteria to adequately represent water quality impacts. Based on the federal regulation at 40 CFR §130.7(b), states must identify water quality limited segments for which other pollution control requirements are not stringent enough to implement any water quality standards, inclusive of all numeric criteria. Given that chlorophyll *a* criteria are "applicable" as water quality standards under this regulation, EPA expects that use attainment decisions be based on the assessment of these criteria, irrespective of associated indicator screening levels. Also, the scientific basis for coupling of chlorophyll *a* and other parameters for assessment purposes is lacking.

§307.9(e)(7)(b). This paragraph requires the collection of a minimum of ten measurements over a period of at least five years in order to assess attainment of water quality standards. We refer to the general comments provided above regarding sampling period requirements. Built-in flexibility should be provided in the water quality standards to allow for exceptions in which limited datasets (collected in fewer than five years) indicate (1) an impairment (or an improvement in water quality) due to short term changes in water quality conditions or (2) an impairment determination that would hold, irrespective of whether additional measurements were collected. We recommend addressing sampling period requirements or options in the assessment procedures, rather than the water quality standards.

§307.9(f) Biological integrity. Language proposed which allows for the deferment of listings for presumed aquatic life uses is not acceptable. EPA is bound by the regulation at 40 CFR §130.7(b)(1)(iii) to identify water quality limited segments for which pollution control requirements required by local, state, or federal authority are not stringent enough to implement any water quality standards applicable to such waters. The regulations make no distinctions as to the appropriateness of the standards or how they were derived. The requirement applies equally to unclassified waters with presumed uses as to classified waters since the presumed standard is still considered the "applicable" standard. Therefore, we would expect that any existing and readily available dissolved oxygen or biological assemblage data that would otherwise be considered of adequate quality and quantity to conclude a use is not being met in a classified water would be used in the same manner to conclude that a use is not being met in an unclassified water.

We believe that category 5B of the State's existing integrated report provides adequate flexibility to the State to address water quality standards issues prior to the development of a TMDL for a given water body. The proposed process for temporarily deferring waters from listing until a use attainability analysis (UAA) can be conducted to verify the presumed uses could be accomplished in the same manner while the water resides in category 5B.

Appendix A - Site-specific Uses and Criteria for Classified Segments

We have received UAAs or other documentation, which were prepared to support standards revisions in the following segments and will initiate review in next few weeks:

- 0306 – Upper South Sulphur River: revised pH criteria
- 0307 – Jim L. Chapman Lake: revised pH criteria
- 0401 – Caddo Lake: revised pH criteria
- 0402 – Big Cypress Creek below Lake of the Pines: revised pH criteria
- 0406 – Black Bayou: revised dissolved oxygen criteria and revised pH criteria
- 0407 – James Bayou: revised dissolved oxygen criteria and revised pH criteria
- 0409 – Little Cypress Creek: revised dissolved oxygen criteria
- 0410 – Black Cypress Bayou (Creek): dissolved oxygen criteria and pH criteria
- 0608 – Village Creek: revised pH criteria
- 0812 – West Fork Trinity River above Bridgeport Reservoir: revised aquatic life use and dissolved oxygen criteria
- 1245 – Upper Oyster Creek: revised dissolved oxygen criteria and removal of public water supply use for portion of segment
- 1305 – Caney Creek above Tidal: revised dissolved oxygen criteria
- 1811 – Comal River: revised temperature criterion
- 1814 – Upper San Marcos River: revised temperature criterion
- 1603 – Navidad River Tidal: removal of public water supply use
- 2308 – Rio Grande below International Dam: removal of public water supply use

UAAs for the following segments are still to be submitted for EPA review:

- 0305 – North Sulphur River: revised aquatic life use and assessment procedures
- 2485 – Oso Bay: revised dissolved oxygen criteria
- 2491 – Laguna Madre: revised dissolved oxygen criteria

We have also received documentation relating to the proposed changes to minerals criteria for specific segments in the Cypress, Sabine, Trinity, Brazos, Colorado, and Nueces River basins and will provide separate comments. Our approval of the proposed use or criteria changes in the water quality standards will be contingent on the supporting documentation contained in these UAAs.

Appendix B - Sole-source Surface Drinking Water Supplies

EPA supports the designation of the sole-source drinking water supply to specific water bodies, as well as the addition of this use category in §307.7(b)(2)(A). The first paragraph states that the list of water bodies is subject to amendment at any time. However, it's not clear that this process will occur through a rule-making action by TCEQ. If TCEQ does not plan to conduct interim standards revisions to incorporate these designations, it may be appropriate to revise this statement to language such as "Where a water body has been identified as a sole-source surface drinking water supply but is not included in Appendix B yet, the same level of protection may be applied."

A number of water bodies in the January 2009 draft of Appendix B have been deleted from the proposed standards. We defer to TCEQ on the list of individual waters that should be adopted in Appendix B, but have a question on one particular change that has occurred since January 2009. Segment 1801 – Guadalupe River Tidal has been added to Appendix B in the proposed standards (or possibly corrected from the listing as segment 0701, also in Calhoun County). Does this designation refer to the Guadalupe-Blanco River Authority's diversion near Tivoli for municipal drinking water to the City of Port Lavaca and other facilities? If so, should a Public Water Supply Use for segment 1801 (or a portion) be designated in Appendix A? Also, Appendix B of the proposed standards also indicates (using parentheses for "1801") that only an unclassified part of the Guadalupe River is designated as a sole-source drinking water supply. However, the segment description for segment 1801 of the Guadalupe River in Appendix C does not appear to include any unclassified portions in this area.

Appendix C – Segment Descriptions

The proposed changes in Appendix C are generally acceptable. The upper boundary for segment 1305 – Caney Creek above Tidal is proposed to change to the confluence with Water Hole Creek. We believe that this location is in Matagorda County, rather than Wharton County where the current upper boundary is found. EPA will review the technical basis for this change in the UAA submitted by TCEQ. EPA will also review the UAA for the boundary changes and use revisions for the upper end of segment 1602 – Lavaca River above Tidal.

Appendix D – Site-specific Uses and Criteria for Unclassified Water Bodies

Most of the new entries proposed in Appendix D are upgraded from, or confirmation of, the presumed aquatic life uses and will not require additional documentation for EPA review.

EPA will provide separate reviews of UAAs for the following water bodies:

- 0101 – Dixon Creek
- 0401 – Harrison Bayou (dissolved oxygen equation used for segment 0410 – Black Cypress Bayou)
- 1111 - Flag Lake Drainage Canal
- 1217 – North Fork Rocky Creek
- 1602 – Lavaca River above (no minimum dissolved oxygen criterion in May – October)
- 1806 – Camp Meeting Creek

A high aquatic life use for Spring Branch (within segment 0801) is proposed. A UAA completed in 1999 was previously reviewed and found to be acceptable. However, this water body was inadvertently omitted from 2000 water quality standards. The 1999 UAA recommended an intermediate aquatic life use and described Spring Branch as a shorter stream (headwaters approximately 0.07 km above Chambers – Liberty County line). No additional documentation for the higher aquatic life use in the 2010 water quality standards needs to be provided to EPA, but TCEQ may wish to verify the boundaries.

TCEQ may also wish to review the previously completed UAA for Dry Creek (within segment 1009 in Harris County). The upper boundary for the portion assigned a limited aquatic life use is proposed to change to "Harris County Flood Control District ditch K-145-05-00, 0.29 km upstream of Spring Cypress Road." Figure 1 in the UAA includes several ditches; however, the ditch labeled as K145-05-00 appears to be several kilometers upstream. A ditch labeled as K145-01-00 is just upstream of Spring Cypress Road.

Appendix E – Site-specific Toxic Criteria

The formatting changes and site-descriptions in Appendix E are very helpful in implementing the site-specific criteria. The site-description for one entry seems to represent a considerably longer reach than would be implemented as a mixing zone. For Buck Creek (within segment 0604 – Neches River below Lake Palestine), the site description reads:

Buck Creek from the edge of the mixing zone with Segment 0604 upstream to the confluence with the unnamed tributary receiving the discharge from the permitted outfall in Angelina County.

We believe that the confluence of Buck Creek and segment 0604 is over ten miles from the point of discharge and recommend revising this site-description.

The site-specific criteria for lead in segment 0404 – Big Cypress Creek are not proposed for revision; however, these criteria may not represent the dissolved fraction of the metal. The acute and chronic criteria were derived in a 1992 study which used toxicity data from EPA's 1984 criteria document and additional results from newer studies. Shortly after this time, EPA issued a policy memorandum which stated that the conversion factors should be incorporated in state water quality standards where aquatic life criteria for metals are based on the dissolved portion, as the agency's criteria are based on the total recoverable portion. While Texas incorporated conversion factors in Table 1 (Criteria in Water for Specific Toxic Materials - Aquatic Life Protection) during the 2000 revision, we don't believe that the site-specific lead criteria for segment 0404 have been revised since the original adoption in the 1995. Additional review may be needed as some of the newer toxicity tests may have measured the dissolved portion.

Appendix F – Site-specific Nutrient Criteria and Screening Levels for Selected Reservoirs

The use of chlorophyll *a*, plus "supplemental screening values" of total phosphorus and transparency, may not be as protective as a single criterion, preferably a causal criterion such as

total phosphorus or total nitrogen. EPA guidance recommends the use of causal variable criteria as the primary determination of use attainment.

The third paragraph states that where a chlorophyll *a* criterion is less than the level currently quantified by laboratory analyses, the criterion is set and applied at 5.0 ug/l (similar language is included for total phosphorus). This language should be moved to TCEQ's assessment procedures *Guidance for Assessing and Reporting Surface Water Quality in Texas*, which already includes similar provisions for other parameters. Detection limits for permitting and compliance purposes can be addressed in the Implementation Procedures. The criteria should be set based on their statistical derivation and not artificially elevated to address current detection level limitations

In consideration of TCEQ's approach to numeric criteria development for selected reservoirs, EPA requests that TCEQ provide further explanation of whether all existing uses of these water bodies can be maintained with proposed numeric criteria. Some proposed chlorophyll *a* and total phosphorus criteria levels, particularly those segments noted below, are indicative of systems exhibiting anoxic hypolimnia, nuisance algae, and reduced biological integrity.

As described in nutrients section of the Implementation Procedures, numeric criteria values are "based on historical data to ensure that reservoir water quality is maintained." This approach does not necessarily improve water quality in reservoirs. There is no indication in the proposed ruling as to whether water quality trends were considered in the evaluation of historical data sets. If declining water quality (increasing causal or response variable concentrations) trends were captured in the data set of 30 points, regardless of the period of record, then it could be argued that the proposed criteria are not protective, but only reflect water bodies in the process of eutrophication. EPA believes the intent of TCEQ's water quality programs should be protection and improvement of waters of the State, and not maintaining the status of declining water quality.

The following reservoirs have proposed relatively large values proposed for chlorophyll *a* criteria (>20 ug/l).

Lake Tanglewood – 37.95 ug/l
Lake Tawakoni – 33.26 ug/l
Lake Murvaul – 50.2 ug/l
Lake Palestine – 24.29 ug/l
Lake Livingston – 20.64 ug/l
Lake Worth – 31 ug/l
Eagle Mountain Reservoir – 22.94 ug/l
Bardwell Reservoir – 20.44 ug/l
Cedar Creek Reservoir – 27.81 ug/l
White Rock Lake – 29.73 ug/l
Lake Arlington – 23.32 ug/l

Benbrook Lake – 24.42 ug/l
Lake Conroe – 21.72 ug/l
Lake Granbury – 20.15 ug/l
Sommerville Lake – 47.64 ug/l
Proctor Lake – 25.52 ug/l
Lake Waco – 21.07 ug/l
Buffalo Springs Lake – 50.8 ug/l
Brady Creek Reservoir – 21.97 ug/l
O.C. Fisher Reservoir – 39.13 ug/l
Red Bluff Reservoir – 21.96 ug/l

Of these water bodies, several criteria appear to be extremely high. EPA questions whether these values are protective of the designated uses for these water bodies and requests an explanation from TCEQ as to why the data availability approach was chosen over more commonly used approaches to criteria development, such as reference water bodies. The State should provide a scientific rationale to ensure criteria support designated uses.

Finally, the proposed nutrient criteria apply only to the mid-lake pool area near the dam, over the thalweg. TCEQ needs to continue to work toward protection of water quality in the entire water body, including arms, coves, and shallower areas. The State should factor this effort into its nutrient criteria planning milestones.

Appendix G – Site-specific Recreational Uses and Criteria for Unclassified Water Bodies

We have received the UAA prepared to support standards revisions for three unclassified water bodies associated with segment 1017 – Whiteoak Bayou above Tidal and will initiate review in next few weeks.